

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001497**Date Inspected:** 29-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1430**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

| | | | | | | | |
|------------------------------------|---|----|-----|----------------------------------|-----|----|-----|
| CWI Name: | Xu Le Feng, Ye Yong Jun, Sha Zi, Cui Weng | | | CWI Presenting | Yes | No | |
| Inspected CWI report: | Yes | No | N/A | Rod Oven in Use: | Yes | No | N/A |
| Electrode to specification: | Yes | No | N/A | Weld Procedures Followed: | Yes | No | N/A |
| Qualified Welders: | Yes | No | N/A | Verified Joint Fit-up: | Yes | No | N/A |
| Approved Drawings: | Yes | No | N/A | Approved WPS: | Yes | No | N/A |
| | | | | Delayed / Cancelled: | Yes | No | N/A |

Bridge No: 34-0006**Component:** Tower Mock-ups and OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

Tower Fabrication Facility**89M Mock-up Assembly**

The Quality Assurance Inspector was informed a ZPMC technician would be performing Ultrasonic testing of skin plates A to B and B to C.

The Quality Assurance Inspector observed ZPMC welding temporary attachments to the joining an additional assembly to the red ZPMC tower Mock-Up Assembly. The Quality Assurance Inspector was informed the purpose was for testing the rotational capacity of the rotating device.

Bay 1

The Quality Assurance Inspector observed ZPMC squaring the length of closed ribs on the milling machine. Eight ribs were stacked and being milled simultaneously. The Quality Assurance Inspector measured the ribs to be approximately five meters in length, 12 millimeters in thickness and 790 millimeters in width.

The Quality Assurance Inspector witnessed ZPMC applying heat to closed ribs in preparation for fitting up and tack welding the diaphragm plates.

Bay 2

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Diaphragm Plate Cutting

The Quality Assurance Inspector observed ZPMC performing cutting operations on there cutting table utilizing a natural gas and oxygen mix. The diaphragm plates were for 28M and 23M elevations. Ten diaphragm plates are staged adjacent to the cutting table.

114M Mock-up Upper and Lower Shaft Assembly

The Quality Assurance Inspector observed no ZPMC personnel working on the 114 Mock-up Assembly today.

77M Mock-up Assembly

The Quality Assurance Inspector observed ZPMC welding a partial joint penetration at the corner stiffener

Bay 3

The Quality Assurance Inspector was informed ZPMC would be performing magnetic particle inspection to side plate SP051

Bay 8

The Quality Assurance Inspector witnessed ZPMC performing heat straightening operations to Diaphragm plate P632. Quality Control relayed the heat straightening was being performed in accordance with HSR1(T)-030.

Below is a digital photograph illustrating the heat straightening in progress.



Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Bertlesman,Greg

Quality Assurance Inspector

Reviewed By: Cuellar,Robert

QA Reviewer